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6 implanting a first pocket implant into the semiconductor substrate from a
7 first side of the gate; and
8 implanting a second pocket implant into the semiconductor substrate from
9 a second side of the gate,
10 wherein the first pocket implant and the second pocket implant are in
11 contact at about the center of a channel region.

D 2
sub 2

31. (Amended) The method of claim 28 wherein the diffusing
increases a reverse short channel effect of the transistor.

D 3
sub 3

1 circuit device comprising:
2
3 providing a semiconductor substrate having a surface;
4 forming a gate oxide on the semiconductor substrate surface;
5 forming a gate on the gate oxide;
6 implanting a first pocket implant into the semiconductor substrate from a
7 first side of the gate at an angle;
8 implanting a second pocket implant into the semiconductor substrate from
9 a second side of the gate at an angle; and
10 diffusing the first and second pocket implants laterally such that a
11 threshold voltage of the transistor is increased.

D 4
sub 4

42. (New) A method of fabricating a transistor in an integrated
circuit device comprising:
3 providing a semiconductor substrate having a surface;
4 forming a gate oxide on the semiconductor substrate surface;
5 forming a gate on the gate oxide;
6 implanting a first pocket implant into the semiconductor substrate from a
7 first side of the gate at an angle;

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8 ~~implanting a second pocket implant into the semiconductor substrate from~~
9 a second side of the gate at an angle; and
10 ~~diffusing the first and second pocket implants laterally,~~
11 ~~wherein the diffusing increases a reverse short channel effect of the~~
12 transistor.

1 43. (New) The method of claim 42 wherein the diffusing
2 increases a threshold voltage of the transistor.

1 44 (New) The method of claim 42 further comprising
2 implanting an enhancement implant in the semiconductor substrate.

D4